



23C
Patent
Attorney's Docket No. 018420-001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#25

S.S.H.
3-9-95

In re Patent Application of

James E. TROUNSON

Application No.: 08/193,634

Filed: February 8, 1994

For: COMPUTER CONTROL SYSTEM
FOR GENERATING
GEOMETRIC DESIGNS

) Group Art Unit: 2306

) Examiner: T. Brown

REPLY BRIEF

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

This Reply Brief is being filed in response to new points of arguments presented in the Examiner's Answer dated January 9, 1995.

The rejection of claim 1 appears to be based on the contention that a processor "must comprise a CPU." (Answer at page 4, line 7). The Answer does not provide any support for such a position, however. While it is recognized that the term "processor" is often used in reference to a device having a central processing unit, when used in its broadest context the term does not mean that a given device "must" have a CPU. For example, the McGraw-Hill Dictionary of Electronics and Computer Technology defines processor as "A device that performs one or many functions, usually a central processing unit." The mere fact that the term is usually used in reference to a central processing unit does not necessarily mean that a device must have a CPU in order to be considered a processor. Rather, as set forth in the definition, any device that performs one or many functions is considered to be a processor. Clearly, the servo systems shown in Figure 3 of the Hyatt patent perform a number of functions, including the processing of feedback

RECEIVED
MAR 08 1995
GROUP 2300

signals and command signals from the data processor 12 to control the operation of the servo motor 99.

Furthermore, such an interpretation of the word "processor" completely ignores the basic teachings of the Hyatt patent. Referring to the introduction appearing in columns 3 and 4, the gist of the Hyatt system is to distribute the data processing characteristic, through the use of devices remote from the data processor 12 which are referred to as "elemental extremities" (column 3, lines 40-52). The servo devices illustrated in Figure 3 are identified as examples of such elemental extremities (column 4, lines 31-32). Thus, rather than disclosing the concept of a single active device for all processing functions, the Hyatt patent emphasizes the distributed processing nature of its arrangement, even though a single CPU may be employed.

The Answer refers to the Hyatt patent at column 6, lines 26-32, as support for the concept that the data processor 12 receives feedback signals. However, claim 1 does not merely recite that the single active processor receives generic feedback signals. Rather, the claim recites a plurality of feedback devices for providing feedback information "indicative of at least one of the actual position and velocity of the tool along an associated axis", and further recites that the single active processor receives feedback information "from each of said feedback devices". As noted previously, the feedback devices in the Hyatt system which provide the feedback information quoted above comprise the resolvers 78, shown in Figure 3. The feedback information that is provided by these devices is received only in the comparator circuits 86. There is no teaching in the Hyatt patent that this feedback information is sent to the data processor 12 itself.

Thus, the mere disclosure in the Hyatt patent that the data processor 12 receives some kind of feedback information, without specifying the nature of this information, cannot be deemed to disclose the subject matter of claim 1. Similarly, it cannot suggest the subject matter of claim 3 which recites that, during each cycle of operation, the active processor carries out "a sequential reading of feedback information and generation of a motor control signal for each of the axes being controlled."

With reference to claim 19, the Answer points out that the Hyatt patent discloses a control panel 14, which constitutes a user interface. However, claim 19 does not merely recite the presence of a user interface. Rather, the claim recites that the user interface enables the user to communicate with the single active processor "to define and/or modify geometric shapes". The control panel of the Hyatt device is shown in detail in Figure 2A. As can be seen therein, this control panel is not used for the purpose of defining or modifying geometric shapes. Rather, the shape information is provided through the tape reader 16. Note, in particular, column 14, lines 1-34 of the Hyatt patent.

For the foregoing reasons, as well as those set forth in Appellant's main Brief, the rejections of the claims are not properly founded in the statute, and should be reversed.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS

By: 

James A. LaBarre
Registration No. 28,632

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: March 6, 1995